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# ARED Newsletter

AGRICULTURE AND RURAL ECONOMICS DIVISION  
ECONOMIC RESEARCH SERVICE

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U.S. DEPARTMENT OF AGRICULTURE



Economic and Social Research  
for Rural America

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## RURAL ECONOMIC DEVELOPMENT STUDY RELEASED IN JULY

In the fall of 1986, due to a concern over structural changes causing economic stress in rural America, the Senate Appropriations Committee directed the Economic Research Service to "...conduct a study to identify alternatives for maintaining and strengthening economic development in rural communities..."

In response to this request, ARED submitted in July, Rural Economic Development in the 1980's: Preparing for the Future. This project was a major undertaking by ARED, with Division staff authoring 13 of 17 papers and contributing substantial amounts of time in all other facets of the project. This study synthesizes existing knowledge on rural development issues and provides up-to-date information on structural changes and performance of the rural economy. The report also offers alternative policies to help displaced people and rural communities adjust to the changes. Included below are some of the study's principal findings.

### The Rural Development Situation

While growth and economic vitality were the dominant themes in the 1970's, structural change and economic dislocation have become overriding rural issues in the 1980's. In recent decades, the rural economy has shifted from heavy dependence on natural resource-based industries to more reliance on manufacturing and services industries, much of it in low-wage, low-skill jobs. This industrial restructuring has left rural areas open to rapid shifts in production technologies that appear to have reduced their competitive position

in the national and international economy.

At the same time, the rural economy has become more closely tied with the national and global economies, making it more sensitive to changes in macro policy, business cycles, and global competition.

In the 1980's, downturns in several industries important to rural areas (agriculture, mining and energy, and manufacturing) coincided, turning what would normally be local or regional problems into a widespread rural decline of national proportions. Rural economic adjustment and stress in the 1980's include:

1. Slow rural job growth and high unemployment;
2. Reduced nonmetro population; and,
3. Underdeveloped human resources.

These conditions do not characterize all rural communities, because rural America is very diverse. Accordingly, generalizations frequently mask important differences among local areas. For example, while nonmetropolitan areas as a whole experienced outmigration during the 1980's, retirement/recreation areas have continued to grow rapidly (albeit at a lower rate than in the 1970s). And while the overall industrial composition of the rural economy is quite similar to that of urban America, the economies of individual local areas tend to be specialized. About 700 of the 2,400 nonmetro counties specialize in agriculture, nearly 700 more are principally dependent on manufacturing, and about 200 depend

heavily on mining and energy extraction. Relatively poor performance in these three sectors has been the dominant cause of rural economic stress in the 1980's. Since these industries tend to be regionally concentrated, targeted State and multi-community development strategies are more appropriate than a uniform national rural development approach.

#### Elements of a Rural Policy

Macro Policy - The rural economy is now an integral part of the national and global economies, so rural areas have a major stake in macro policies that promote rapid rates of real economic growth.

Sectoral Policy - Sectoral policy focuses on the performance of individual industries or focuses on redressing industrial decline. But these policies can become protectionist, inhibiting the ability of rural areas to adapt to change.

Territorial Policy - Current rural stress results from a complex set of economy-wide and international factors, greatly reducing the potential effectiveness of policies specifically targeted at rural areas.

Human Resource Policy - With rural educational attainment levels lower than urban and the continuing industrial and occupational restructuring in the rural economy, these policies are central to ameliorating rural economic stress.

#### Policy Choices

Ultimately, the choice of national rural development policy is political, a balancing of the interests of groups whose future

opportunities are being affected by widespread stress and structural change in the rural economy. Given the diversity of rural conditions and interests, much of the responsibility for devising program strategies to deal with rural stress will fall to State governments, and successful implementation programs will depend on the leadership of rural communities. There are, however, significant externalities resulting from rural structural change that provide the economic rationale for a Federal role. That role might include creating a macro environment conducive to economic growth, facilitating multi-state or multi-community approaches to solving rural problems, and assuring adequate levels of investment in rural human resources. The Federal Government also has a comparative advantage in providing information and conducting analyses of broad national and rural economic change that help to shape policy.

Some will argue for a broader Federal role based on their perceptions of inequity resulting from the rural stress of structural change. There are human costs associated with geographic and occupational mobility, just as there are economic (and budget) costs associated with policies to slow the process of change. Historically, the performance of the U.S. economy has been enhanced by its ability to adapt to changing technologies and marketplace conditions. There appears to be little disagreement that future adaptation will be required, and that overall, public policy should be designed to facilitate that process. There is, however, considerable debate about the rate at which structural change should proceed, and the role of public policy in easing the adjustment burden for displaced people and impacted communities.

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## OFFICE OF THE DIRECTOR

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### Office Activities and News



Richard W. Long, currently head of the Government and Development Policy Section in the Division, has been selected as the new Associate Director of ARED. Dick will replace David

Brown, who leaves in October to assume a new post at Cornell University.

Dick Long came to Washington in 1976 to become research director of the U.S. Senate Commission on the Operation of the Senate. He was subsequently a research associate in the Governmental Studies Program at the Brookings Institution. While at Brookings he worked under contract with the policy development staff in the Office of the Associate Administrator for Rural Development Policy in the Farmers Home Administration. He later served as a consultant to that office, working on Secretary Bergland's Structure of Agriculture project.

From 1980 to 1985, Dick was staff director of the Rural Research and Analysis Staff in the Office of Rural Development Policy. In 1984, Secretary Block named him a U.S. delegate to the OECD-Williamsburg, VA, conference on Rural Public Management.

He joined ARED in October 1985 as head of the State and Local Government section in the Rural Business and Government Branch. Last year Dick served as a consultant to OECD on the second

phase of the Rural Public Management Project. He has written on U.S. and European rural development policy. He received his Ph.D. in political science--public administration from the University of Missouri-Columbia, in 1973.

A working group of social scientists in the North Central Region (North Central Regional Committee NCT-146--Social Science Research Priorities) presented a proposal for developing improved collection and access of community, firm, and household data to the Experiment Station Directors of the North Central Region at their July meeting in Ames, Iowa. David Harrington represents ERS on the NCT-146 committee, composed of researchers and administrators in the disciplines of agricultural economics, rural sociology, family economics, and human development. A one year planning study to formulate needs, plans, and working arrangements for enhanced nationwide data collection, access, and analysis has been requested.

Brian Perkins, a senior agriculture and development policy official of Agriculture Canada met with ERS and USDA officials. His visit, coordinated by David Harrington, included briefings by David Freshwater, Jerry Stam, Ron Meekhof, Jim Johnson, Ken Clayton, Jim Vertress, and Larry Salathe. Subjects included the Farm Credit System, domestic agricultural policy reforms, and multi-lateral trade negotiations.

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## FARM SECTOR FINANCIAL ANALYSIS BRANCH

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### View From the Branch

by Jim Johnson



In this inaugural contribution to the ARED Newsletter, I want to express my thanks for the warm professional manner with which we have been received by Division staff

and management. Many of you are already familiar with aspects of FSFA's work, since we have cooperated on various research and staff projects. FSFA has four sections, Farm Income Estimation, Farm Financial Analysis, Farm Costs and Returns, and Economic Indicator Research and Forecasts. A glimpse of the type and breadth of our work is in the Section reports.

All Branches have aspects of their program that are unique. FSFA's unique contribution comes in the form of economic data series reports, for which we have Departmental responsibility. These series include farm level and sector-wide estimates of net income, the balance sheet, and enterprise and firm level estimates of costs and returns. In preparing our reports, we must do two things. First, we decide what numbers to get and how to properly estimate them. Second, we analyze our findings to present the most accurate picture of the farm sector. Both tasks are important, since our data affect the public's perception of economic and financial well-being of farmers, farm businesses, and the farm sector as an industry.

### Economic Indicators Research and Forecast Section

#### About the Section

The EIRF Section forecasts farm income for the USDA and researches issues effecting farm income and its distribution.

#### Research

Gary Lucier and Richard Kodl are using accounting and econometric models to improve forecasts of income for the U.S. and by type of farm.

Mary Ahearn is researching income by size of farm, and analyzing the importance of off-farm income sources to farmers.

Diane Bertelsen is examining how income and costs change after tax, as well as developing a benchmark study of cost, finance and production factors. She is now beginning to coordinate the Farm Sector Review of 1986.

William Serletis has been identifying the demarcation between small and commercial size farms in agriculture, and examining inter-relationships between income and control of assets in agriculture.

Mary Ahearn, Robert Dubman, and Greg Hanson are completing a series of bulletins on the financial performance of specialized dairy, corn, and wheat farms for 1985 in three major areas: net returns, cost structure, and financial stress. In addition, each report will present performance measures by farm size classes and by major production regions. Specialized

farms are defined as farms with at least \$40,000 in total production, of which 50 percent or more is in the specialty commodity.

#### Papers Presented and Meetings Attended

Greg Hanson and Diane Bertelsen presented an invited paper on tax reform impacts on farm production and investment decisions at the AAEA annual meeting. The authors point out that the 1986 tax legislation is likely to lower the after-tax annual cost of land, raise machinery costs to the producer, and lower taxes for most farms other than dairy, cow/calf and farrow finish hogs (farms with breeding livestock).

Also at the AAEA meeting, Mary Ahearn presented a paper on trends in farm numbers and net cash income among midsized farms (those with sales of \$40,000 to \$250,000 in constant 1982 dollars). The paper shows that the number of farms with sales below \$100,000 declined between 1974 and 1982. The net cash income per farm declined for all farms in constant dollars between 1974 and 1982 and declined even in nominal dollars for farms with sales below \$250,000.

Mary Ahearn participated in a seminar on "Rural Income Sources, Farm Equity, and Rural Viability" in Portland, OR, sponsored by the Western Rural Development Center. The purpose of the seminar was to begin to plan a regional project in the West which would address different aspects of the farm household-rural community linkages. Mary gave a presentation on the financial well-being of the agricultural sector and of farm operator households, describing recent trends in nonmetro areas.

#### Farm Income Estimation Section

##### About the Section

FIES estimates net farm income, and several other income measures for all the States and the U.S. The various income measures and the many component accounts are published annually in the "National Financial Summary" and the "State Financial Summary" issues of the Economic Indicators of the Farm Sector series and monthly in Agricultural Outlook.

##### Research

In June, preliminary State and National estimates were given to BEA for use in estimating the Department of Commerce's National, State, and County income and production measures. The preliminary estimate of net farm income for 1986 was estimated to be \$38.2 billion, breaking the previous nominal record by nearly \$4.0 billion. A substantial rise in Government farm program payments combined with a reduction of nearly 9 percent in production expenses was responsible for the record level of net income.

#### Farm Financial Analysis Section

##### About the Section

The FFA publishes annual estimates of the U.S. farm sector balance sheet and other farm financial indicators.

##### Research

The Board of Governors of the Federal Reserve System (BGFRS) also publishes U.S. farm financial estimates. The Fed numbers are similar to USDA's, yet different enough to create some problems for data users, particularly policy

makers. Ken Erickson, Duane Hacklander, and Jim Ryan have been addressing these issues. Dialogue between Emil Melichar, Senior Economist, BGFRS, and the Section has led to procedural changes on both sides, resulting in more consistent data series.

The Section is revising both the estimation procedures and the database management systems used to generate estimates of the Balance Sheet. The biggest revisions are in the procedures to estimate crop inventory values, and to estimate nominal and real capital gains. Crop inventory values will now exclude the value of crops under loan to the Commodity Credit Corporation (CCC). The calculations for both nominal and real capital gains have also been changed. Lastly, the database management system is being revised in several ways.

#### Papers Presented and Meetings Attended

Jim Ryan presented a paper entitled "Alternative Asset Valuation Methods and the Rate of Return to Equity Capital in Agriculture" at the AAEA meetings. This paper concludes that current USDA estimation procedures overvalue farm equity relative to equity measures obtained from traditional market value basis balance sheets, and especially relative to the actual investment in the sector. As a result, the rate of return to equity measures underestimate the income share and overstate the capital gains share of the total return. This distortion is intensified to the extent that capital gains are realized through the conversion of equity to debt.

#### Briefings and Miscellaneous

Jim Ryan is on travel to Egypt working as part of the Agency's Farm Income Data Collection and Analysis Project. The purpose of the project is to enhance the Egyptian Ministry of Agriculture's capacity for collecting and analyzing ag data. The project is funded by the Agency for International Development via USDA's Office of International Cooperation and Development (OICD).

#### Farm Costs and Returns Section

##### About the Section

FCR provides a series of reports assessing the financial performance of U.S. farm businesses and households.

#### Research

FCR has just recently finished its reports for 1986. These reports include a technical report which provides a discussion of data sources and the analytical approaches taken to analyze financial performance along with results; a summary Agriculture Information Bulletin (which presents a capsuled view of results); and, 33 individual State and regional reports. A major finding was that about 10 percent of all farm businesses and households were in a vulnerable financial position in 1986, representing slight change from 1985.

Dargan Glaze and Mike Salassi have finished revising and testing a farm-level cost of production model. This model will be used in the Section's economies-of-size research, starting with rice production. The Branch will have the capability to analyze production

distribution by cost level, as well as farm and farm operator characteristics associated with the cost distribution. Results of this research will be presented at an ERS-sponsored symposium in Louisiana in November.

Drafts of the Farm Costs and Returns Survey (FCRS) questionnaires for next year are being finalized in cooperation with NASS. Besides the detailed expenditure version, cost-of-production versions for corn, barley, cotton, peanuts, flue-cured tobacco, and farmer-fed beef are being designed. Also, questions will be added relating to conservation practices, irrigation management, and pesticide use. A special "household" version will also be run to examine socio-economic factors in the sample.

As the FCRS questionnaires reach final form, the Branch, NASS, and CED will participate in a pretest. This year Jim Johnson, Bob McElroy, Mike Salassi, Mitch Morehart, Diane Bertelsen, and Greg Hanson spent a week in August interviewing farmers. This pretest will allow us to refine the questionnaire's wording and flow.

#### Papers Presented and Meetings Attended

Bob McElroy attended the 19th annual meeting of the American Peanut Research and Education Society in Orlando, Florida, July 14-17. Bob met with extension agronomists from each of the major peanut-growing states to discuss ERS' cost-of-production (COP) program. Cost estimates are used in the determination of the quota support rate for peanuts. ERS and NASS will be conducting a peanut version of the Farm Costs and Returns Survey (FCRS) next year and

the meeting provided a unique opportunity to get input and support from regional peanut specialists.

Jim Johnson and Bob McElroy attended the meeting of the National Agricultural Cost of Production Standards Review Board July 27-28. They reviewed the draft versions of the upcoming 1987 FCRS questionnaires with the Board and got valuable input. The talk led to lively discussion as all the members are intimately involved with how their own operations are being affected by the ongoing financial restructuring of agriculture.

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#### **FINANCE AND TAX BRANCH**

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##### View from the Branch

by Pat Sullivan

Not to be left behind by the recent reorganization of ERS, the Finance and Tax Branch has undergone a reorganization of its own. The former Finance Markets and Tax Analysis Sections have been combined and imaginatively renamed the Rural Finance and Tax Section. The new section is headed by Ron Durst, and is comprised of three projects. The rural financial markets and rural financial linkages projects continue analyzing the demand for and supply of financial capital for rural households, businesses, and governments. The tax policy research project continues examining the importance of changes in Federal tax policy for income distribution, capital formation, and resource allocation within the farm economy.

Jerry Stam's Agricultural Finance Section was left intact. The section continues to evaluate the structure and performance of financial institutions serving the agricultural sector, innovations in agricultural lending practices, and alternative farm credit assistance programs. The reorganization has resulted in a leaner staffing plan, but the broad research mission of the Branch remains unchanged. I'd like to think this implies an increase in productivity rather than a lower level of output, even correcting for obvious biases.

This is an interesting time to be involved in economic research on finance and tax issues. Estimating the impacts of the Tax Reform Act of 1986 continues to be a popular pastime. But the Tax Reform Act hadn't even gone into effect before proposals to change its provisions were circulating. Evaluating the effects of these proposed changes, when the impacts of the Act itself haven't had time to get reflected in individual and business behavior, becomes quite challenging.

As we begin formalizing research plans for FY '88, some likely pursuits include: the causes and consequences of rural bank failures; the impact of deregulation on the structure and performance of the rural banking system; the effect of Federal policies on the cost and availability of agricultural credit; and the impacts of tax reform on the farm sector.

Moreover, the effects of finance and tax policy decisions are far reaching and of interest to many researchers, both within and outside the Agency. In the months ahead, I hope we can build stronger ties with others interested in these issues, fostering more information sharing and developing joint research projects.

### Ag Finance Section

#### Research

Jerry Stam, Steven Koenig, and Greg Gajewski are conducting an analysis of lender acquired property. The 1980's have seen an increasing amount of farm property acquired by the lenders via foreclosure, deed in lieu of foreclosure, and farmer bankruptcy. Preliminary results show that the four major institutional lenders -- the Farm Credit System, commercial banks, Farmers Home Administration, and life insurance companies -- now hold an estimated 8 million acres valued at \$3.8 billion. The total acreage of lender property is equal to the combined areas of Delaware and Maryland.

#### Publications

David Freshwater and David Trechter (formerly AF) had "New Approaches to Financing Long-Term Farm Debt" published in the ERS Issues in Agricultural Policy series in March. They found reduced expectations in agricultural earnings triggered a downward adjustment in farmland values that, with cash flow difficulties of many farmers, threatens the solvency of both farmers and lenders. Four farmland financing mechanisms are discussed to add to existing arrangements: secondary mortgage markets, commodity-based loans, shared-appreciation mortgages, and warehousing foreclosed farmland.

Jerry Stam coordinated the annual Agricultural Finance: Situation and Outlook report published in March. Findings included that general economic conditions were more favorable to the Ag sector in 1986 and farm income mostly stabilized, with prospects for moderate growth

in 1987. Also, in 1986, the farm sector's financial difficulties passed increasingly to farm lenders, whose problems will continue in 1987. Lenders will be competing for a smaller loan volume as the farm sector pays down its debt.

Steve Koenig had a paper published in the April issue of The Journal of Farm Managers and Rural Appraisers. The article, "Effect of the 1986 Tax Law on Minimum Bid Real Estate Prices," predicts the effects of the Tax Reform Act of 1986 on maximum bid prices for farm real estate investments which include depreciable assets. Findings show maximum bid prices for real estate with a high depreciable base declined as much as 43 percent.

Deano Hagerman and Greg Gajewski's paper, "Patterns of Financial Institution Failures: Some Thoughts on Policy Issues," was published in the May/June issue of FDIC's Banking and Economic Review. The article analyzes the county-level distribution of bank and S&L failures over the 1983-86 period. Bank failures were more concentrated in the nation's heartland than S&L failures, although 1986 failures of both show a growing concentration in a five-state "energy bank" region in the southwest.

#### Papers Presented and Meetings Attended

David Freshwater moderated a symposium at the AAEA meeting in early August on "The Problems and Prospects of the Farm Credit System." It included presentations on the effectiveness of recent Federal assistance measures for the FCS, an FCS restructuring proposal, and a look at what might happen if FCS rescue efforts fail.

Greg Gajewski presented a paper titled "Agricultural Lending, Regulator Behavior, and Bank Closure in 1986: a Two Stage Logit Model" on March 5 at the annual Eastern Economic Association (EEA) meetings in Washington. In the paper, bank closure is modeled as bank regulators' response to a bank's deteriorating financial condition. Bank size, farm loan concentration, and the local economy's dependence on the oil and gas sector were shown to be significant determinants of closure probabilities. The model can also be used to forecast, predicting between 126 and 174 banks closures in 1987.

Greg Gajewski attended the Chicago Federal Reserve Bank's annual Bank Structure and Competition Conference in May. The stated theme this year was the merging of investment and commercial banking, but this seemed to take second place to issues about increased financial intermediary stress, especially in the savings and loan industry. Estimated costs to resolve current and expected S&L insolvencies now range from \$20 to \$45 billion.

#### Briefings and Miscellaneous

Steve Koenig, Jerry Stam, Greg Gajewski, Bob Reinsel (NED), and Herman Bluestone (RBI) spent considerable time in April analyzing Title V on financial assistance of the Family Farm Act (sponsored by Senators Byrd and Harkin and Representative Gephardt). If enacted, this bill could provide many financially stressed "family farmers" an opportunity to restructure their farm debt at a high cost to the Federal Government and major farm lenders. The Bill encourages States to develop mandatory farm loan mediation programs between lenders and farmers

by supplying Federal financial assistance to these programs and to farmers who restructure their debt under mediation. Another main part of this Bill is the creation of a Federal program to assist persons leaving farming.

Professor Dean Hughes of Texas Tech University presented "Social Costs and Benefits of Federal Farm Credit Subsidies" to the ERS staff in March. This project, done under an agreement with ERS, examined the costs and benefits of subsidizing credit to the farm sector for the period 1978 through 1985.

#### Rural Finance and Tax Section

##### Research

Stephen Hiemstra and Matthew Shane (ATAD) completed "Is an Agreement on Exchange Rates a Prerequisite for Successful GATT Negotiations on Agriculture?". Since exchange rate changes are equivalent to a uniform tax (subsidy) in their effect on trade, large swings in exchange rates have provided an important incentive to increased agricultural protectionism in the 1980s. GATT may need to resolve the problems posed by exchange valuation changes before progress can be made in agricultural talks. The paper reviews monetary issues and outlines possible policy options.

Ken Krause has submitted "Corporate Farming 1969-82" for publication in ERS's AER Series. This report shows the number of incorporated U.S. farms rose by 178 percent from 1969-82. The 59,792 corporate farms made about 25% of all farm sales in 1982. Federal income tax advantages provided the chief impetus for farms to incorporate prior to 1982. Family

type farms accounted for about 70% of the incorporated farms in 1982.

Cliff Rossi and Greg Gajewski had their paper, "Tax Reform Impacts on Agricultural and Rural Banks", accepted for the AEA meeting in December. Average effective tax rates for agricultural and rural banks should increase only slightly under tax reform from 16.1 to 16.5%.

##### Publications

Don Lerman and Bill Reeder (HUD) had "The Affordability of Adequate Housing" accepted into AREVEA Journal in May. The article proposed a new measure of the difficulty of affording housing, based on the cost of housing that just meets adequacy standards. Their approach finds that the standard high rent-to-income measure overestimated housing affordability problems of renters by 20 percent in 1975 and 24 percent in 1983.

Bill Reeder (HUD), Don Lerman, John Hession (ARED), and Pat Sullivan had "National and Rural Housing Policy: Historical Development and Emerging Issues" published as an RDRR in March 1987. The authors identify key changes in the U.S. housing finance system in the past 50 years. They discuss the proper Government role in the areas of mortgage credit and insurance in the primary and secondary mortgage markets, homeownership policies, rental subsidy programs, housing affordability and rural housing.

An article by Cliff Rossi entitled "Cattle Feeding Investments: The Impact of the Tax Reform Act of 1986" is in the August issue of Agricultural Finance Review. It suggests that tax reform is likely

to reduce the attractiveness of cattle feeding ventures in nonfarm investors' portfolios.

Papers Presented and Meetings Attended

Don Lerman presented his paper "Perspectives on Household Portfolios, 1977-1983" at the EEA meetings. Don showed that while the proportion of households with high debt relative to income rose over the 1977-83 period, most of this increase was in wealthy households (high net worth).

Cliff Rossi presented a paper, coauthored with Ron Durst, entitled "Farm Tax Liability under Tax Reform" at the August AAEA meetings. Results from that work show that overall tax liability for farm sole proprietorships should decline by 7 percent under tax reform.

Ron Durst spoke at the National Conference of Lt. Governors held in Washington on April 11, 1987. Ron's presentation focused on the Tax Reform Act of 1986 and its implication for farmers.

Cliff Rossi presented a paper, coauthored with Greg Gajewski, entitled "Estimating the Effects of the Tax Reform Act of 1986 on Agricultural and Rural Banks" at the EEA meetings. The loss of key tax preferences by banks does not in most cases offset lower marginal tax rates for ordinary income.

Jim Mikesell attended the annual meeting of Western Regional Committee W-165, "Rural Credit Systems in the West: The Role of Public Lending Programs" in San Francisco, in March. He presented

"Comparing Rural and Urban Banks", which contrasted the portfolios and operating statistics of nonmetro and metro banks in total, and by such factors as size and status as an agricultural lender, during and at year's end of 1985. This study shows that, despite the growing financial ties between rural banks and the Nation's financial markets, there is still much uniqueness in the rural situation.

Dan Milkove attended the Western Economic Association conference in July, in Vancouver, Canada. He coauthored a paper, "Guaranteed Lowest Pricing", which was presented by Vincy Fon of the George Washington University. This paper investigates the theoretical basis for the guaranteed lowest price marketing strategy used by many retailers in recent years. By projecting a low price image, a firm may bring in additional customers and even preempt some of the consumer price search that it is seemingly designed to reward.

Briefings and Miscellaneous

In July, Ron Jeremias and Ron Durst contributed to an analysis of the potential effects on the grape industry of proposed higher excise taxes on wine. They found that some proposed tax increases could raise the retail price of wine by 10 to 30 percent.

## FARM AND RURAL ECONOMY BRANCH

### View from the Branch

by Tom Carlin

Research reports and journal articles are the visible products from our Branch's work program. Less visible, but no less important, activities include controlled correspondence and staff work.

FREB and other branches throughout ERS are asked to draft answers to letters by private citizens to President Reagan, Secretary Lyng, and other government officials. Letter topics include inquiries from students about economic conditions in farming and farm based communities, suggestions about public programs and policies to assist farmers, and personal financial situations of individuals adversely affected by financial restructuring of U.S. farming. I am especially pleased with the quality of the responses prepared by FREB staff. I want to publicly thank the staff for the quality and timeliness of their responses.

Branch staff work has been dominated by USDA responsibilities in administering the Immigration Reform and Control Act of 1986. The Act contains special provisions that allow illegal aliens who have done certain agricultural work to obtain residency status. The act also provides a mechanism for growers to "replenish" such workers who are no longer employed in farming.

USDA and the Department of Labor are jointly responsible for estimating the shortage of workers in perishable commodities and for determining the number of replenishment alien workers to be admitted to the United States. ERS and NASS have been delegated the USDA responsibility for this

activity. Bob Coltrane and Vic Oliveira are participating with NASS in a joint working group responsible for determining how the required estimates will be made. This activity involves designing a survey to collect information on special agricultural worker employment on farms and developing statistical procedures for making the required estimate. This activity requires considerable time and money but the basic visible manifestation of the work will be a single number first released in October 1989.

### Ag Labor and Household Well-Being Section

#### Publications

Don Larson's paper, "Employment Growth Helps Some But Not All Nonmetro Households: A Case Study in 10 Georgia Counties," was recently released as a Rural Development Research Report. The research indicated that rapid employment growth in a 10-county nonmetro area in southern Georgia provided jobs, but not for most longer term resident households whose head lived in the area during 1976-81. Despite the area's impressive job growth during this period, only 20 percent of the longer term resident households had more workers in 1981 than in 1976.

Vic Oliveira and John Kuehn (formerly of ARED) recently completed an RDRR entitled "Distribution of Employment Growth in 10 Ozark Counties: A Case Study." The study was the third in a series of three regional studies of the effects of rural economic growth. The area was chosen to examine the effects of rapid growth in a nonmetro area with many retirees and many businesses based on tourism. The authors found that

service industries, some manufacturing, and a concentration of retirees can provide a strong economic base for a rural area.

#### Papers Presented and Meetings Attended

Vic Oliveira spoke on "Measuring the U.S. Ag Work Force" at a seminar on "Manpower Projections and Analysis for Planning and Development." The June seminar was sponsored by the Department of Labor and was attended by statisticians from developing countries. These statisticians are studying U.S. data collection programs for the purpose of improving their knowledge of the types and sources of employment-related data available for planning purposes and to develop their skills in data collection and analysis.

#### Farm Structures Section

#### Publications

Matt Smith, Clark Edwards (NED), and Neal Peterson had their article, "How Many Farms? Projecting U.S. Farm Numbers and Sizes," in the June issue of RDP. This new look at recent farm trends sees a different future for U.S. farm structure than what had been earlier supposed. Instead of continuing steep declines in farm numbers, recent trends imply more stability, both in overall numbers of farms and in the continuing presence of midsize farms.

#### Papers Presented and Meetings Attended

Matt Smith presented a paper coauthored with Fred Hines and Judy Sommer (ACL) titled "Regional Characteristics of U.S. Farms and Farmers in the 1980s", at the

meeting of the Rural Sociological Society August 14 in Madison, WI. The paper proposes that an enhanced understanding of the diversity of U.S. agriculture -- resources, enterprises, economic and social characteristics of farm people -- can shed light onto the regional differences in the economic performance of the farm sector. Furthermore, a more detailed look at the characteristics of farms and farm people in the 1980's can also provide insights into the potential effectiveness of alternative agricultural and rural economic development policies in addressing income problems among the farm populations of different regions.

Donn Reimund attended the CAEEMS/AAEA Meeting in East Lansing, MI, to participate in a joint Canadian - U.S. Symposium on synthesizing structure and technological change in agriculture. He presented an overview of the structural modelling work in ARED.

#### Ag and Community Linkages Section

#### Research

Judy Sommer and Fred Hines have finished the draft report to the U.S. Congress on the status of the family farm. Titled "Declining Farm Exports: Recent Changes in Agricultural Trade and Differential Impacts on Nonmetro Counties of the U.S.", the report shows how shifts in foreign demand for U.S. agricultural products played an important part in stimulating the expansion of the farm sector in the 1970's and intensifying the downturn of the 1980's. It examines how ag exports affect not only the farm production sector but also the community at large where agriculture is a major economic activity.

**Wendell Holmes** is currently working on a paper that contrasts the roles that irrigated and dryland farming have played in the development of both the agricultural and rural economy of West Texas.

**Jackie Bhola** is working on a paper dealing with the importance of nonfarm income to southeastern black farmers in the 1980's. This study assesses the importance of nonfarm job opportunities and unearned sources of income to the white and minority farm populations in four southern regions (Delta, Piedmont, Coastal Plains, and Eastern Highlands). Jackie's paper has been accepted for presentation at the 45th Professional Agricultural Workers Conference, Tuskegee University, in December.

**Wyn Francis** is currently analyzing the structure of the U.S. agribusiness industry at the regional and sectoral levels. He hopes to determine the relative importance of agribusiness industries to various regional economies and thereby indicate which regions may be at economic risk.

#### Publications

In June, **Mindy Petrulis**, **Bernal Green**, **Fred Hines**, **Richard Nolan** (formerly of ACL), and **Judy Sommer** published "How Is Farm Financial Stress Affecting Rural America?" as AER-568. The report found that farming-dependent counties comprise some of the most economically distressed parts of nonmetro America. This appears to be due to their inability to diversify economically, leaving them vulnerable to changes in natural resource markets, commodity prices, and farm conditions. In depth comparisons are made regarding rural

America's current economic health by region and by reliance on farming.

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#### RURAL BUSINESS AND GOVERNMENT BRANCH

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##### View from the Branch

by Norm Reid

You may have noticed that the State and Local Government Section has a new name: the Government and Development Policy Section. The change is more than cosmetic; it represents a real shift in the objectives. The shift in focus reflects the importance of considering carefully the implications of changing rural conditions for rural policy. And it expresses our belief that government programs and policies for rural areas at all levels of government are important subjects for careful study. We'll implement this shift by developing an institutional memory about past rural development programs and strategies, assessing their past and future impacts.

The shift doesn't mean that we will abandon the work we've traditionally done on local government services and finances. Local governments continue to be important actors in promoting economic development and maintaining rural quality of life. Monitoring their performance will remain central to our work. Nor will we make specific policy recommendations. But we believe that policy decisions should be based on knowledge, rather than speculation. It is our responsibility to report on research

that bears on policy issues coming before the Department and the Congress, in a way that policymakers can use it.

#### Branch Activities and News

On June 22, Norm Reid participated in a meeting of the Western Governors Association in Denver. The association is developing a project on rural development and prepared a report for discussion that identified counties in the region suffering from long-term decline. The report was scheduled to be revised and presented to Western governors at their July meeting.

On May 14, Norm Reid spoke to the Council of State Governments' (CSG) Agriculture and Rural Development Policy Steering Committee. The Committee is looking for ways to bridge the gap between the needs of State officials, especially legislators, and information providers, primarily in Federal agencies. ERS has taken a lead role in helping CSG formulate its mission as well as providing data and other help in the last two years. Currently, talks are focused on how ERS data can be shared with CSG, which needs basic social and economic data for nonmetro areas organized on a State basis.

Requests for the videotape "Changing Rural America," produced by ARED and the Extension Service, continue. The film's message, that conditions in the rural economy have changed, continues to be relevant. Numerous State and local organizations and universities have found it useful as an introduction to rural diversity and rural change. Copies may be obtained on loan or for sale (\$25, make checks payable

to "ERS") in any format, from Joseph Lockley (202/786-1542).

OECD has licensed the sale of its book Rural Public Management for distribution in India. The book summarizes the results of Phase I of the OECD's Rural Public Management Project and was written by Norm Reid.

Norm Reid participated in the Southern Rural Development Center's Conference on "The Rural South in Crisis: Challenges for the Future." His paper, "Entrepreneurship as a Community Development Strategy for the Rural South," pointed to the recent rate of new enterprise creation in the South, which exceeds the national rate, as an optimistic sign. But, he noted that several other factors, especially the South's lagging educational system, will likely keep entrepreneurial strategies from being a panacea for the region. David Harrington also presented his paper, "The Status of Southern Agriculture" at the meeting.

#### Government and Development Policy Section

##### Publications

Dick Long, Norm Reid and Ken Deavers co-authored a staff report called "Rural Policy Formulation in the U.S.", which was adapted from their report prepared for the OECD Rural Public Management Project, Phase II.

CSG published a monograph on state programs to help rural areas with infrastructure. Called "Managing Rural Infrastructure," the report was prepared under a contract between ERS and CSG's new Center for

Agriculture and Rural Development and circulated widely to state officials. CSG has also received a grant from the Economic Development Administration to expand the study to all states and to include metropolitan areas.

Ron Durst (FT/RFT) and Rick Reeder's article "Tax Reform Implications for Rural Communities and Farmers" was in the June Rural Development Perspectives. They found that tax reform means the same for most rural people as for others: lower individual tax rates. Other rural effects beyond that stem from the elimination of the deduction for local sales taxes, new limits on local bond issues, and higher taxes on capital gains for livestock farmers.

Several staff reports and one separate publication under a cooperative agreement have been released this year. Gerald Doeksen and Janet Peterson at Oklahoma State University analyzed the literature on the output of rural local governments and wrote "Critical Issues in the Delivery of Local Government Services in Rural America." Beverly Cigler at North Carolina State university prepared a staff report on needed research called "Setting Smalltown Research Priorities." Barry Ryan wrote "Estimates of Wastewater Treatment Capital Requirements in Rural America." This report documents the cost (as of 1984) of eliminating the rural shortfall in wastewater treatment facilities and complying with the Clean Water Act.

Norm Reid and Dick Long co-authored a chapter entitled "Rural Policy Objectives: Defining Problems and Choosing Approaches," for the Senate Study. They discussed

alternative formulations of "the rural problem", arguing that if legislators wish to have a "policy" rather than merely a collection of programs, they will have to make clearer choices.

Papers Presented and Meetings Attended

Dick Long was a featured speaker at the Community Development Society annual meeting in Morgantown, WV, on July 29. The theme of the meeting was "Community Development: Responses to Emerging Realities." In his remarks, Dick emphasized that reduced public resources make it more important than ever for policymakers to carefully choose policy goals and strategies, rather than scattering resources in too many directions.

Nina Glasgow was invited speaker and discussion group leader at the Northeast Rural Sociologists Conference held at Cornell University in June. She presented a paper on "Community and Transitions to Retirement."

In March, Norm Reid and Dick Long participated in a meeting of the Extension Service's Task Force on Rural Revitalization in New Orleans. To follow up its highly publicized report Revitalizing Rural America, the Task Force proposed six themes around which extension efforts should be organized: 1) enhancing economic competitiveness, 2) diversifying rural economies, 3) improving rural governments, 4) developing community leadership, 5) helping families and communities adjust, and 6) maintaining natural resources. The Task Force is attempting to refocus Extension's work on the key issues of structural adjustment within the rural economy.

### Briefings and Miscellaneous

Rick Reeder gave a seminar on recent fiscal developments for rural State and local governments. Since 1980, the fiscal capacities of rural states have declined relative to urban states. The most recent surveys by the National League of Cities and National Association of Counties show that small cities (those under 10,000 population) and nonmetro counties have had considerably greater difficulty raising revenues than did larger cities and metropolitan counties.

Nina Glasgow has been active on committees and a task force examining data issues and data sets for an aging population. She is ERS subject matter specialist on the Forum for Aging-Related Statistics, a Federal interagency committee with representatives from approximately 30 agencies. Nina is also on the Gerontological Society of America Task Force on Data on Aging. The Task Force has made recommendations on aging-related statistics on the 1990 Census a major focus of its activity.

Nina Glasgow gave a seminar on the demographic and economic status of the nonmetro older population to RBG in April. Major differences between metro and nonmetro older people are indicators of economic well-being, not location per se. For example, nonmetro areas have higher concentrations of older people with less education and lower occupational status.

### Rural Business and Industry Section Research

Martha Frederick, Geographer, and Celeste Long, Agricultural

Economist, have been conducting a large literature search for their rural entrepreneurship bibliography project. To date, nearly 150 articles and books have been read and abstracted for inclusion in the bibliography. The next milestone in the bibliography project will be an oral presentation-update in late September when all the cooperators involved in the entrepreneurship study meet here in Washington.

The bibliography fulfills one of the objectives of a larger study being done in the division. The study, "Entrepreneurship: Assessment of Its Potential as a Rural Development Strategy", is being conducted by ERS and four universities--Cornell, Clemson, the University of Arizona, and the University of Wisconsin-Madison. It is funded by ERS and the Economic Development Administration. Project Co-Directors are Herman Bluestone and David McGranahan (HR/RLM).

### Publications

Herman Bluestone and Mindy Petrulis (ACL) wrote "Falling Energy Prices Hurt Rural Mining Counties" for the June issue of Rural Development Perspectives. In their article, the authors illustrate how the economic environment in rural counties dependent on mining has been affected even more by recent bad times than have conditions in rural farm counties.

The June issue of RDP also featured, "Computer Model Helps Communities Gauge Effects of New Industry," an article by Celeste Long, Mike Woods (Oklahoma State-Stillwater), and L.L. Jones (Texas A&M). In their piece, the authors explain that trying to figure out how a new or an expanding company will affect a community has, in the

past, generally meant either a seat-of-the-pants estimate or a hired consultant. No more. The computerized impact model described in the article has proved its worth to rural Texas communities and now has been adapted for use on personal computers, putting it within reach of most communities.

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#### HUMAN RESOURCES BRANCH

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##### View from the Branch

by Max Jordan

Good secretaries come and go, and one of ours has gone. Blenda Gately, my secretary, transferred on August 1 to the David Taylor Naval Ship Research and Development Center in Annapolis as a Branch Secretary. Blenda had a major role in our Division move from 12th Street and in the second move internal to our New York Avenue home. (She must have heard that part of ARED is expecting to move again.) Blenda has been much more than a "mover". She has been a "right hand" to me and to every Section in the Branch at some time during her tenure in ARED.

Six of our Branch researchers had major responsibilities as sole or joint authors on five chapters of "Rural Economic Development in the 1980's: Prospects for the Future". Other Branch personnel were involved in the report typing and review panel assignments. I am particularly pleased with the quality of those papers and their contribution to the overall report. However, we are now discovering the delays this activity has caused in

our FY '87 work plan progress, as we develop plans for FY '88. Still, we expect about 20-25 percent more output in FY '88 than was planned for FY '87, despite a 20 percent reduction in our FY '88 staffing.

I made a presentation in May to the Census Advisory Committee on Agriculture Statistics concerning our plans to modify the farm population definition. We have worked with the Census Bureau since 1944 to publish the annual farm population data series based on farm residence. Our plans to shift to a definition based on receipt of farm self-employment income and declaration of a farm occupation were heartily endorsed by the Committee. This modification allows us to identify a category of population with economic linkage to farming. We can then identify a subset of those with entrepreneurial linkage to farming.

##### Income and Well-Being Section

##### Research

During the 1980's the Census Bureau began the Survey of Income and Program Participation (SIPP). Bob Hoppe and Bob Clemons (DSC) spent several months at the Census Bureau where they used large Census SIPP files to create smaller, more condensed files that can be read by SPSS. Bob Hoppe will use these files to examine nonmetro income, wealth, and poverty. Leslie Whitener (RLM) will also use the files in a study of multiple job holding in nonmetro areas.

##### Publications

"Public Policy and Rural Poverty: A View from the 1980's" by Ken Deavers, Bob Hoppe, and Peggy Ross appeared in the delayed December

1986 issue of the Policy Studies Journal. The authors suggest a wide range of policies, from rural development programs to changes in public aid programs, to help the rural poor. They stress the role that income transfer programs can play, citing the large share of nonmetropolitan poor belonging to groups that cannot reasonably be expected to work. Poverty policy should focus on ways to redress problems with the income distribution without unduly impairing the essential allocative and organizational roles of the market.

"Policy Implications of the Economics of Farm Family Poverty in the United States," by Linda Ghelfi and William Saupe (U. Wis.) also was in the December Policy Studies Journal. The authors show that the federal government defines poverty as insufficient cash income to cover minimum levels of consumption (i.e., low income). Yet, the farm poor have unique characteristics due to the self-employed nature of the farm business and the scattered rural residence inherent to the life style. Farm operators are self-employed business persons, unlike rural or urban poor who are wage earners or unemployed. Farm income is affected by weather, prices, and other phenomena uncontrolled by the farmer, causing farm income to fluctuate widely.

Linda Ghelfi coauthored "Women in the Rural Sociological Society: A History," with Fern Willits (Penn. State) and Michele Lipner (U.MO-Columbia). Through a variety of stages over many years, women have helped to mold the Rural Sociological Society. This paper briefly describes the activities of some of those who have been and are part of the organization.

#### Papers Presented and Meetings Attended

Several IWB researchers participated in special sessions at the RSS Madison meeting, organized by Alton Thompson, chair of the Rural Poverty Research special interest group. Contributors and their papers included:

Peggy Ross and Alton Thompson, "Income Distribution and Source: Patterns among Nonmetro Families, 1985".

Linda Ghelfi wrote "Income Needs and Expenditures: Metro-Nonmetro Differences in Wisconsin." This paper examines the economic status of Wisconsin's nonmetro households in comparison to its metro households from several angles. Overall, comparing metro and nonmetro income, needs, and expenditures showed Wisconsin's households to be quite homogeneous in their spending patterns and needs. Linda concludes that nonmetro households seeming to feel no worse about their economic situation (earning less) may indicate that nonmetro households are satisfied with less income.

Leif Jensen presented "Rural Minority Families in the United States: A Twenty Year Profile of Poverty and Economic Well-Being," at a special session on the demography of rural America. Leif found that there has been a tremendous improvement in the economic status of rural families over the past twenty years. In relative terms, these advances were strongest among nonmetro minorities, a partial reflection of their extremely deprived position in 1960. Leif's results suggest that the labor force commitment in rural areas is strong enough that policies aimed at

creating employment will go a long way toward alleviating poverty among nonmetro minorities.

#### Population Studies Section

##### Research

ARED is sponsoring the writing of a history of rural sociological work by the Bureau of Agricultural Economics (BAE). BAE existed from 1919 and 1953, conducting sociological research now done in the Human Resources Branch. During the late 1930's and early 1940's the BAE was the largest center of rural sociology and closely related rural social research. It also had the good fortune to attract a number of people who were already or who later became very prominent in their fields. The history is being prepared, in cooperation with Cornell University, by Olaf Larson and Edward Moe, both of whom were on the BAE staff.

In connection with this work, an advisory panel met in Washington on May 19-20, Consisting of Former BAE staff members Conrad Taeuber, Louis Ducoff, Douglas Ensminger, Gladys Bowles, Paul Jehlik, and Calvin Beale. Vivian Wiser of ARED's History Section also assisted.

#### Papers Presented and Meetings Attended

Linda Swanson and Margaret Butler presented a paper, "Faces and Future of the Nonmetro Workforce," at the RSS meeting. They found that nonmetro counties are at a disadvantage with regard to their labor force, due largely to outmigration of young people in the prime working ages of 20-44. Discouraged workers, high levels of disabilities, and lower average education levels have contributed to

the lower rate of nonmetro labor force participation.

#### Rural Labor Markets Section

##### Publications

"Labor Market Areas for the United States" by Charles Tolbert (Florida State) and Molly Killian was published as an ERS Staff Report in August. This report documents the procedures used to delineate 382 labor market areas (geographic areas encompassing both the place of work and the place of residence of a local population) for the U.S. The results were then used to identify groups of counties with strong shared commuting ties.

#### Papers Presented and Meetings Attended

Alan Bird gave the keynote address at the annual Great Plains Ag Council meeting in Fort Collins, CO, in early June at a session chaired by ERS Administrator John Lee. Alan presented "The Special Rural Development Challenges of the Great Plains," in which he explained that people in the region need training for and access to higher-paying jobs. However, he contends that most of the jobs will be both outside the traditional core industries (agriculture, energy, mining and outdoor recreation) as well as the rural areas themselves. Alan perceives a permanent and increasing need for widespread relocation of nonmetro residents of the Great Plains nearer to large nonfarm job sites.

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## NATIONAL ECONOMY AND HISTORY BRANCH

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### View from the Branch

by Tom Hady

I've preached before from this pulpit about the importance of analyzing the rest of the economy if you want to understand the problems of the agricultural sector. I won't harangue again, but I think the following statistics effectively describe how the relative importance of the farm sector has changed:

<u>Year</u>	<u>GNP</u>	<u>Farm Product</u>	
	\$ Bil	\$ Bil	% GNP
1930	91.1	7.6	8.3
1940	100.4	6.4	6.4
1950	288.3	20.0	6.9
1960	515.3	20.2	3.9
1970	1015.5	26.3	2.6
1980	2732.0	65.5	2.4
1985	3998.1	75.5	1.9

One important part of agriculture's connections with the remainder of the economy is the businesses that supply inputs for farms and market their output. Work in the National Aggregate Analysis Section suggests that the food and fiber system as a whole -- value added by everyone from the phosphate mine to the restaurant -- amounted to about 17.5 percent of GNP in 1985, down from 20.4 percent in 1975. (We don't have similar estimates back to 1930.) Employment in the food and fiber sector dropped from 41 percent of the labor force in 1947 to 18.5 percent in 1985.

### Agriculture and Rural History Section

#### Publications

A study by Norwood Kerr, entitled "The Legacy: A Centennial History

of the State Agricultural Experiment Stations", has been published by the Missouri Ag Experiment Station. It traces the development of the experiment station system by focusing on administrative policies and procedures governing relations between the State stations and their partners in USDA.

Vivian Whitehead's "Women in American Farming: A list of References", was published by the Ag History Center, U.C., Davis, in June. It contains over 100 pages of references on the history of women in agriculture.

Vivian Wiser wrote the introduction to Teruo Nishijima's book, Memoirs of Horace Capron, published in Japan.

Jane Porter wrote the historical section to "Some International Experiences with Mandatory Supply Controls" in the May 1987 Agricultural Outlook.

Bill Glynn and Doug Bowers have contributed to recent Farmline articles on the farm credit system and on economic cycles, appearing in the July and March issues, respectively.

Doug Bowers, Vivian Wiser, and Jane Porter have prepared a series of press releases on Agriculture and the Bicentennial of the Constitution, covering such topics as trade, women, and food. Some of these have been reprinted in various newspapers and trade journals.

Claudia White has completed "A Chronology of Agricultural Marketing Services Activities, 1961 to 1987."

### Papers Presented and Meetings Attended

Norwood Kerr presented a paper at the June 3-5 Symposium on Publicly Sponsored Agricultural Research held in Fargo, North Dakota. His presentation focused on attempts by USDA to reorganize its science and education activities in light of provisions in Title XIV of the 1977 Farm Bill. The disruptive effects of changes produced in relations between USDA and State agricultural experiment stations were emphasized.

Lowell Dyson gave a paper in March to a symposium of the Center for the Study of the Recent History of the United States titled "What Archivists and Librarians Should Be Collecting During the Present Farm Crisis."

Doug Bowers, Lowell Dyson, and Vivian Wiser attended the Organization of American Historians meeting in Philadelphia, in April. Doug also went to the Philadelphia meeting of the Society for Historians of the Early American Republic July 16-18.

### Briefings and Miscellaneous

Doug Bowers briefed a group of FAS agricultural attaches and other foreign service officers on the history of USDA price support programs in June. He and Vivian Wiser met with George Clark, director of AMS Information, on June 18 to help that office incorporate historical information on AMS into speeches and publications.

Lowell Dyson has recently become president-elect of the Society of Historians of American Communism. In June he and Dr. Gould Colman of

Cornell were interviewed by Iowa Public Radio on historical records and the current farm crisis.

### National Aggregate Analysis Section

#### Research

A Computable General Equilibrium (CGE) model of the U.S. economy is being developed in NAA. The model is based on a Social Accounting Matrix (SAM) data base of the U.S. economy, which incorporates the circular flow of goods and income through the economy. We are interested in details about farm households, labor, land tenure, etc. ARED researchers with expertise in labor markets, rural-urban population, farm structure, and an interest in working in the CGE model are encouraged to contact Ken Hanson or Maureen Kilkenny.



Participants will have an opportunity to work with Dr. Sherman Robinson, internationally recognized CGE modeling authority. He is on leave from the Agricultural and Resource Economics Department, U.C., Berkeley to help NAA develop a CGE modeling capability. Among Dr. Robinson's many publications, is the well-known textbook, "General Equilibrium Models for Development Policy," which he co-authored with Kemal Dervis and Jaime de Melo.

Mr. Robinson has taught at both the graduate and undergraduate level at Princeton, Harvard, and the London School of Economics and Political Science. His research and teaching experiences include

economic development, world trade, policy analysis, econometrics, and general equilibrium modeling. He also worked for six years at the World Bank in the Development Strategy Division, Development Research Department.

Negotiations are continuing with Nobel Laureate, Wassily Leontief on cooperative work to examine the conceptual and empirical issues involved in estimating an "engineering-type" capital coefficient for ag input-output. An "engineering-type" capital coefficient is the amount of additional capital investment needed to expand agricultural capacity one unit.

#### Publications

Chin Lee, Jerry Schluter, Bill Edmondson, and Darryl Wills wrote "Measuring the Size of the U.S. Food and Fiber System," a March AER. They review procedures used to estimate income and employment in the food and fiber system and their usefulness in economic policy work. Findings show that civilian employment in the food and fiber system fell from over 21 percent of the workforce in 1975 to 18.5 percent (21.4 million full-time workers) in 1985. Also, the system's share of gross national product fell from 20.4 percent in 1975 to 17.5 percent (\$700.8 billion) in 1985.

Jerry Schluter wrote "Factor Income in Farming and the General Economy," published in Research in Domestic and International Agribusiness Management. In the 1920's and 1930's, farm operators provided much of the inputs and factor commitments, creating flexibility to adjust. Today the

farm sector has more fixed linkages and commitments to factor owners and the sector outside farming. Now, a small shift in terms of trade can have dramatic impacts on the farm operator.

Mark S. Henry, Agapi Somwaru, Jerry Schluter, and Bill Edmondson wrote "Some Effects of Farm Size on the Nonfarm Economy," appearing in the North Central Journal of Ag Economics. The paper considers selected impacts on nonfarm sectors of the economy if U.S. agriculture had fewer medium-size farms and more large farms. The purpose is to provide an empirical estimate of the magnitude of change in nonfarm output required to support alternative-size distributions of farms in the U.S.

David Bessler and Ron Babula's "Forecasting Wheat Exports: Do Exchange Rates Matter?" is in July's Journal of Business and Economic Statistics. Findings indicate that exchange rates have little influence on wheat sales and shipments.

#### Papers Presented and Meetings Attended

Chin Lee presented "Examining the Leontief Paradox in the U.S. Food and Fiber Trade" at the annual meetings of the Western Ag Economics Association in Kansas, in July. Findings indicate that U.S. ag exports are more capital and land intensive and less labor intensive than U.S. ag imports.

Ken Hanson and Maureen Kilkenny attended the fifth annual Applied CGE Workshop, May 1-2, in Stanford, CA. At the conference, a challenge was issued to CGE modelers to provide better information to

decision-makers about the effects of changes in the economic environment.

**Darryl Wills** presented "The Impact of Farmers' Reduced Input Purchases on the Nonfarm Economy," at the annual meetings of the Southern Regional Science Association in Atlanta, March 27-28. The paper estimates the effects of reduced expenditures on employment in the rest of the economy.

#### Macro Economics Section

#### Publications

**John Kitchen and Mark Denbaly's** paper, "Commodity Prices, Money Surprises, and FED Credibility: A Comment of Overshooting vs. Undershooting," was in the May issue of the Journal of Money, Credit and Banking.

In March, ERS released "Energy and U.S. Agriculture: State and National Fuel Use Tables, 1978, 1980, and 1981," a staff report by **Dave Torgerson**, John Duncan (NRED), and **Annette Dargan**. This report contains estimates of energy, State energy use estimates summarized by type of farm operation under the two primary ag categories, crops and livestock.

#### Papers Presented and Meetings Attended

**Mark Denbaly's** presented "Shortrun Impact of U.S. Macroeconomic Policy on U.S. Agricultural Markets," at the AAEA meetings in August. The paper examines the shortrun theoretical relationships between macroeconomic policy and U.S. agriculture via total output, the general price level, and interest and exchange rates.

At GW's Ninth Symposium on Mathematical Programming With Data Perturbations in May, **Dave Torgerson** presented "The Tradeoff Between Statistical Fit, Realism and Optimizing Behavior in Economic Models: A Survey with Emphasis on Asset Pricing".

**Ralph Monaco** and **Chin Lee** (NAA) attended the spring INFORUM meeting in Greenbelt, Maryland. One simulation presented concluded that comparable price shocks in the agricultural and crude oil sectors produced different macro outcomes, with the crude oil sector shock hurting the economy more.

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#### FEATURED RESEARCH

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A new facet to the ARED Newsletter is the featured research section. In each issue, we will take a little closer look at an ongoing research project by ARED staff.

#### Predicting Farm Size Distribution



**Neal Peterson** and **Matt Smith**, both of the Farm Structure Section in the Farm and Rural Economy Branch, are

projecting the changing distribution of farm sizes across regions for all U.S. farms. They are using longitudinal and cross-sectional data from the Census of Agriculture to specify an econometric model that will estimate regional probabilities of farms moving from one size class to another. The model will also help them to analyze the nature of the relationship between farm structure and selected exogenous variables such as farm income on a county basis, nonfarm per capita income, commodity prices, land values, and age distribution of the local population.

Through Neal and Matt's model, it may be possible to study and predict a number of important problems and trends in the farm economy that have broad policy implications. For example, they will try to predict changes in the regional distribution of farm sizes -- the expected number of large, medium, and small farms as well as the number of people entering and leaving farming. These predictions should be valuable to both Federal and State policymakers making decisions regarding farm programs and future potential target groups for such programs. This type of information may also be important for addressing potential financial market stresses and job training needs for displaced farm people.

Another research area that could benefit from Neal and Matt's work is the study of sources of off-farm income to farm families in the local economy. The model, as conceptualized, makes it possible to analyze the relationship between off-farm income and farmers' ages, educational backgrounds, and types of farms. At some later stage Neal and Matt may be able to anticipate not only regional reliance on off-farm income and employment, but also to project the type of farmer who may need off-farm employment.

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## THE DATA SCENE

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Since much of what is done in ARED involves working with large databases on tape or disk, we are adding a new section, appropriately called The Data Scene. In this section, Division members have the opportunity to share with others new breakthroughs in data retrieval, programming, etc. for the various databases we use.

Alex Majchrowicz of the Rural Business and Industry Section is developing a database of business and industry information that can be easily used with Lotus 1-2-3 on the personal computer. The database initially will contain time series information for selected variables from income and employment files developed by the Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), and Bureau of the Census.

The database provides information for the selected variables, grouped by counties, for the U.S., Census regions, and Census divisions. For the BEA and BLS data, all counties are grouped by Beale code and summarized by metro/nonmetro classification. Additionally, nonmetro counties are grouped by the Ross-Green typology and by adjacency/nonadjacency to a metropolitan area. For the Census County Business Patterns file, which contains establishment and employment data, counties are grouped by metro/nonmetro status.

The database will be used to establish a situation and outlook report on economic conditions and change in rural businesses and industries, answer staff requests, provide data to researchers, and reduce data processing costs by limiting the need to access large, mainframe files.

In addition, Celeste Long, also with Rural Business and Industry, is creating larger summary files that will allow access to certain years or industry types without using the entire original datasets. This is being done with BLS, BEA, County Business Patterns county level, and Dunn and Bradstreet files. These datasets will be available for division use as of October 1, 1987.

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## CONFERENCES

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The Great Plains Agricultural Council will sponsor a symposium, "The Rural Great Plains of the Future" in Denver, Colorado, November 3-5. The planned program includes papers by David Harrington and Norm Reid. Some of the other speakers include Luther Tweeten, Oklahoma State University; Ron Knutson, Texas A&M University; Barry Flinchbauger, Kansas State University; and, Don Paarlberg, Purdue University. For information contact: Norman Landgren, Executive Director, Great Plains Agriculture Council, 109 Agricultural Hall, Lincoln, NE 68583, (402) 472-5868

"Jobs, Education, and Technology: The States' Agenda for Rural Economic Development", sponsored by the Council of State Governments' Center for Agriculture and Rural Development and the Economic Development Administration will be held October 5-7, in Lexington, Kentucky. The conference will focus on the fusing of education and technology to create jobs in rural America. For information, contact Joe Friend at (606) 252-2291.

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## PERSONNEL

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### Office of the Director

Betty Nichols returned to ARED June 22 as secretary to the Deputy Director. We welcome her back after a year's leave.

Toni Hendrick transferred from ERS to the Bureau of Land Management on June 22. She had been secretary for the Ag and Rural History Branch and to the Deputy Director. We wish her well in her new position.

Carmen Pigler worked as a summer intern in the Office of the Director, helping in the editing process for the Senate Study released in July. Carmen is entering her senior year at South Carolina State College in Orangeburg, SC, where she is majoring in economics.

### Human Resources Branch

Leif Jensen began working for Income and Well-Being Section as a sociologist in May of this year. Leif completed his Ph.D. in sociology at the U.WI-Madison this past spring. While at Wisconsin he pursued interests in social stratification, demography and the sociology of economic change. His dissertation examined poverty and public assistance utilization among immigrants to the United States between 1960 and 1980. In the Fall, Leif plans to extend this analysis and to study rural-urban differences in the utilization and effectiveness of public assistance programs. Leif and his wife Kirsten have two children and make their home in Silver Spring. His interests include running and biking and he is a devout Yankee fan.

Gwen Matlock became the Income and

Well-Being secretary in March, arriving from Youngstown, Ohio where she had worked for an architectural firm. Gwen and her daughter presently reside in Maryland.

In mid-July, Juanita Butler joined the Rural Labor Markets Section as secretary. Juanita came to ARED from the American Council of Life Insurance, where she worked as a Personnel Assistant.

In June, Susan Pollack transferred from the Rural Labor Markets Section to work in the Agriculture and Trade Analysis Division.

#### Rural Business and Government Branch

Merv Yetley, formerly Head of the Food Demand and Utilization Section in IED, transferred to RBG to lead a project that will study the impact of rural development programs on the rural economy. Merv has Ph.D.s in Rural Sociology and Economics from Iowa State University.

Aaron Solomon, a sophomore in Government at Cornell, was a summer intern with the Government and Development Policy Section and the Ag and Rural History Section, NEH. He wrote a history of the the various attempts in the past to put all rural development work into one government agency.

Alex Majchrowicz came to Rural Business and Industry from NRED's Land Branch, where he monitored foreign investment in U.S. farm land under the Agricultural Foreign Investment Disclosure Act of 1978. Another of Alex's projects involved the study of property transfer records and development of the 1986-87 ERS Rural Land Transfer Survey. This was a first time survey undertaken to determine the rate at which rural land is transferring and characteristics of the buyers and

sellers involved in the transactions. Alex has a B.S. and M.S. in Agriculture and Resource Economics from the University of Maryland. He resides in Brookeville, MD, with his wife Terri and their two children.

#### Farm and Rural Economy Branch

After some time away from ERS, Jackie Bhola transferred in May to Ag and Community Linkages from the Human Resources Branch.

#### Finance and Tax Branch

Joan Redd joined the F&T Branch in March as a part-time clerk-typist. Prior to joining ERS, Joan worked as a personnel assistant with FmHA.

Tonia Carter joined the Ag Finance Section as a Clerk-Typist on June 8. Tonia hails from Capitol Heights, Maryland and just graduated from Morgan State University.

Greg Gajewski transferred to Ag Finance in March, becoming leader of the ag lending institutions project in July.

Stephen W. Hiemstra, formerly of the International Economics Division, transferred to the Finance and Tax Branch in June. Stephen will work on the rural financial linkages project of the Rural Finance and Tax Section. He holds a Phd. in agricultural marketing and public policy from Michigan State University. Since coming to ERS in 1983, Stephen has done research on the quality of trade statistics, the Spanish corn market, and monetary implications for GATT negotiations on agriculture.

Ken Krause transferred from the Finance and Tax Branch, ARED to the Crops Branch, CED.

## National Economy and History Branch

**Lowell Dyson** joined the Ag & Rural History Section in March as a historian. Lowell received his B.S. from Iowa State and his M.A. and Ph.D. in history from Columbia University. He spent a number of years at Virginia Polytechnic Institute, teaching recent American history and doing research on agricultural interest groups. In 1985 he joined the Center of Military History in Washington where, among other duties, he was responsible for the bicentennial lecture series and the Center's fellowship programs.

**Claudia K. White** has joined the Ag & Rural History on detail from the Farm and Rural Economy Branch. She will be working on the history of USDA since 1961, focusing on the AMS and the Packers and Stockyards Administration.

**Bill Glynn** left the Ag & Rural History on July 31 to take a job as an agricultural economist with the Foreign Agricultural Service. His expertise in economics and computers will be sorely missed.

**Harriett Brinkley** transferred to National Aggregate Analysis as Section Secretary on March 2. She last worked in the Finance and Tax Branch and has been with ERS four years.

**Maureen Kilkenny** joined National Aggregate Analysis as an economist in the Intersectoral Policy and Performance Project. Maureen recently finished a Ph.D. in Agricultural Economics at the University of Minnesota.

In May, **Ralph Monaco** was named head of the Macroeconomics Section, where he had been in charge of the situation and outlook work in macroeconomics since the summer of

1985. Before that, Ralph was an econometrician at the CIA, working on energy demand models for OECD countries, among other things. His Ph.D. is from the University of Maryland, where he worked in the INFORUM research group under the direction of Clopper Almon, Jr.

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## AWARDS AND RECOGNITION

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In August, **Leslie Whitenet** of the Rural Labor Markets Section completed all requirements for a doctoral degree in Sociology from the American University in Washington, D.C. Her dissertation was entitled, "Structural Diversity in the Hired Farm Work Force: Implications for Theory, Research and Policy."

**Darryl Wills**, formerly of National Aggregate Analysis, has been awarded a National Science Foundation Fellowship for graduate study in economics and will begin at MIT in September.

An Administrator's Special Merit Award for 1986 was won by a team of economists headed by **David Harrington**, and included Gary Lucier, **Ralph Monaco**, **Jim Malley**, Barbara Stucker, and Pat O'Brien. The citation reads "For outstanding staff work in completing an early analysis projecting the financial well-being of the farm sector during 1985-91."

Appreciation

A major "Thank You" goes to Paul Myers, Rural Business and Government Branch, for the dozen or so ARED Newsletters he put out over the past three years. Paul did an outstanding job editing the Newsletter. He created a high standard of quality and timeliness that all who read this publication greatly appreciated.

While it's not possible to mention everyone who helped put this issue of the newsletter together, a few should be recognized. Special thanks go to **Stephanie Cuthbertson** both for her typing and cheerful approach despite seemingly endless text; to **Mindy Petrulis** for his unparalleled precision in proof-reading and his valuable ideas, many of which I've employed; to **Carolyn Riley** for the staff pictures; to **Jim Morrison** and his staff for their help in graphic design; and to **Tom Hady** and **Pat Saunders** for helping me get the hard copy.

Contact the Editor

For address changes/additions, questions or comments, or for submitting items to appear in the ARED Newsletter, please contact **Wyn Francis**, (202) 786-1524, Room 336G, ARED/ERS/USDA, 1301 New York Ave., Washington, D.C. 20005-4788.